

CLAIMS

1. A recombinant expression system, capable, when transformed into a plant, of expressing a DNA sequence encoding DRR206 protein, said DRR206 protein having at least 60% identity to amino acids 1-184 of Figure 8, which system comprises control sequences effective in said plant operably linked to said DNA sequence.
2. The expression system according to claim 1 wherein the plant is *Brassica napus*.
3. The expression system according to claim 1 or 2 wherein the control sequences include a strong constitutive promoter.
4. The expression system according to claim 3 wherein the strong constitutive promoter is the 35S promoter.
5. The expression system according to claim 1 or 2 wherein the control sequences include an inducible promoter.
6. The expression system according to claim 5 wherein the inducible promoter is responsive to pathogen infection.
7. The expression system according to any one of claims 1 to 6 wherein the recombinant expression system includes T-DNA for integration of the expression system into a plant genome.
8. Plant cells containing the expression system of any one of claims 1 to 7.
9. The plant cells according to claim 8 wherein the plant cells are *B. napus* cells.
10. A transgenic plant having integrated into the genome of said plant the expression system of any one of claims 1 to 7.
11. A recombinant expression system, capable, when transformed into a plant, of expressing a DNA sequence encoding defensin protein, said defensin protein having at least 60% identity to amino acids 1-72 of Figure 9, which system comprises control sequences effective in said plant operably linked to said DNA sequence.
12. The expression system according to claim 11 wherein the plant is *Brassica napus*.

13. The expression system according to claim 11 or 12 wherein the control sequences include a strong constitutive promoter.

14. The expression system according to claim 13 wherein the strong constitutive promoter is the 35S promoter.

15. The expression system according to claim 11 or 12 wherein the control sequences include an inducible promoter.

16. The expression system according to claim 15 wherein the inducible promoter is responsive to pathogen infection.

17. The expression system according to any one of claims 11 to 16 wherein the recombinant expression system includes T-DNA for integration of the expression system into a plant genome.

18. Plant cells containing the expression system of any one of claims 11 to 17.

19. The plant cells according to claim 18 wherein the plant cells are *B. napus* cells.

20. A transgenic plant containing integrated into the genome of said plant the expression system of any one of claims 11 to 17.

21. A method for producing a plant with improved disease resistance comprising transforming a plant with an expression system comprising a DNA sequence encoding DRR206 protein operably linked to control sequences effective in said plant, said DRR206 protein having at least 60% identity to amino acids 1 to 184 of Figure 8; and growing the plant under conditions such that the DRR206 protein is expressed.

22. The method according to claim 21 wherein the plant is resistant to a pathogenic organism selected from the group consisting of *Rhizoctonia solani*, *Leptosphaeria maculans* isolate PG3, *Leptosphaeria maculans* isolate PG4 and *Sclerotinia sclerotiorum*.

23. A plant produced according to the method of claim 21.

24. Seeds from the plant of claim 23.

25. A method for producing a plant with improved disease resistance comprising transforming a plant with an expression system comprising a DNA sequence encoding defensin protein operably linked to control sequences

effective in said plant, said defensin protein having at least 60% identity to amino acids 1 to 72 of Figure 9; and growing the plant under conditions such that the DRR206 protein is expressed.

26. The method according to claim 25 wherein the plant is resistant to a pathogenic organism selected from the group consisting of *Rhizoctonia solani*, *Leptosphaeria maculans* isolate PG3, *Leptosphaeria maculans* isolate PG4 and *Sclerotinia sclerotiorum*.

27. A plant produced according to the method of claim 25.

28. Seeds from the plant of claim 25.

29. A method for producing a transgenic *B. napus* plant comprising:

providing seeds of a *B. napus* strain;

providing a recombinant expression system, capable, when transformed into *B. napus*, of expressing a DNA sequence encoding DRR206 protein, said DRR206 protein having at least 60% identity to amino acids 1 to 184 of Figure 8, which system comprises control sequences effective in *B. napus* operably linked to said DNA sequence;

transfecting *Agrobacterium* with the recombinant expression system;

germinating the *B. napus* seeds;

removing cotyledons from the germinated seeds;

cocultivating the cotyledons with the transfected *Agrobacterium*;

regenerating shoots and roots from the cotyledons; and

growing the transgenic *B. napus* plants to maturity.

30. A method of providing resistance in *B. napus* to a pathogenic organism comprising:

providing seeds of a *B. napus* strain;

providing a recombinant expression system, capable, when transformed into *B. napus*, of expressing a DNA sequence encoding DRR206 protein, said DRR206 protein having at least 60% identity to amino acids 1-184 of Figure 8, which system comprises control sequences effective in *B. napus* operably linked to said DNA sequence;

transfecting *Agrobacterium* with the recombinant expression system;

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germinating the *B. napus* seeds;
removing cotyledons from the germinated seeds;
cocultivating the cotyledons with the transfected *Agrobacterium*;
regenerating shoots and roots from the cotyledons;
growing the transgenic *B. napus* plants such that DRR206 is expressed within the cells of the transgenic *B. napus* plant, thereby preventing infection of the transgenic *B. napus* plant by the pathogenic organism.

31. The method according to claim 30 wherein the pathogenic organism is selected from the group consisting of *Rhizoctonia solani*, *Leptosphaeria maculans* isolate PG3, *Leptosphaeria mculans* isolate PG4 and *Sclerotinia sclerotiorum*.

32. A method of reducing damage to a plant by a pathogenic organism comprising:

providing a plant having cells arranged to contain elevated levels of DRR206 protein, said DRR206 protein having at least 60% identity with amino acids 1-184 of Figure 8; and

growing the plant such that DRR206 is expressed within the cells of the plant, thereby preventing or inhibiting growth of the pathogenic organism.

33. The method according to claim 32 wherein the pathogenic organism is selected from the group consisting of *Rhizoctonia solani*, *Leptosphaeria maculans* isolate PG3, *Leptosphaeria maculans* isolate PG4 and *Sclerotinia sclerotiorum*.